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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,490	02/22/2002	Warren E. Cory	X-1054 US	3728

24309 7590 11/01/2006

XILINX, INC  
ATTN: LEGAL DEPARTMENT  
2100 LOGIC DR  
SAN JOSE, CA 95124

EXAMINER
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AGHDAM, FRESHTEH N

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/082,490

Applicant(s)

CORY, WARREN E.

Examiner

Freshteh N. Aghdam

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8 and 13-20 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see page 6, filed 10/16/2006, with respect to the rejection(s) of claim(s) 1-9 and 11-20 under Lundh et al and Ahmavaara et al have been fully considered and are persuasive. Therefore, the final rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Shida et al (US 6,014,406), and further in view of Lundh et al (US 6,373,834).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shida et al (US 6,014,406), and further in view of Lundh et al (US 6,373,834).

As to claims 1 and 9, Shida teaches a communication network comprising a master transceiver that performs channel-bonding operations in order to be able to establish a communication for aligning data (i.e. synchronization; Fig. 1, means 1a and 1b); a plurality of first level transceivers that perform channel bonding operations, each first level transceivers being controlled by the master transceiver (Fig. 1, means 2a; Col. 2, Lines 49-67; Col. 3, Lines 1-7); and a second level transceiver that perform channel



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bonding operations, the second level transceiver being controlled by one of the plurality of first level transceivers (Fig. 1, means 3a-3d), wherein the first and second level transceivers comprise a controller for receiving a mode control signal designating the transceiver as a master transceiver or a slave transceiver (Col. 2, Lines 49-67; Col. 3, Lines 1-7). Shida is not explicit about the master transceiver comprises a controller receiving a mode control signal designating the transceiver as a master transceiver or a slave transceiver. Lundh, in the same field of endeavor, teaches that the master transceiver comprises a controller receiving a mode control signal designating the transceiver as a master transceiver or a slave transceiver (Fig. 1; means 22) since base station 22 acts as a slave transceiver when communicating with the radio network controller (RNC; Fig. 1, means 20); and also, the base station(s) 22 acts as a master transceiver when communicating with the mobile station(s) (Fig. 1, means 24).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Lundh with Shida in order to enabling macrodiversity, diversity combining or soft handover by adding middle nodes (i.e. base station(s)) between the RNC(s) and the mobile station(s), in which the base station(s) acts as a master transceiver when communicating with the slave transceiver(s) and acts as a slave transceiver when communicating with the RNC(s).

As to claim 2, Shida further teaches that each of the plurality of transceivers can be selected as either the master transceiver, one of the first level transceivers (Fig. 1, means 2a) or one of the second level transceivers (Fig. 1, 13-14, means 3a-3d; Col. 2, Lines 49-67; Col. 3, Lines 1-7).

As to claim 3, Shida further teaches that the master transceiver(s) and the plurality of first level transceivers generate respective control signals according to different cycles of a clock (Col. 2, Lines 21-25, 38-41, and 49-67; Col. 3, Lines 1-7).

As to claim 4, one of ordinary skill in the art would recognize that it is obvious for any transceivers to include at least one buffer for the channel bonding operations as it is evidenced by Lundh (Fig. 2 and 2A: Col. 8, Lines 6-39) in order to utilize a temporary storage location for data information being sent or received. Usually located between two different devices that have different abilities or speeds for handling the data. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Lundh with Shida for the reason(s) stated above.

As to claim 11, Shida further teaches that the transceivers comprise a plurality of levels, where each slave transceiver comprise an input to receive a control signal from a previous level (Col. 2, Lines 21-25, 38-41, and 49-67; Col. 3, Lines 1-7).

As to claim 12, Shida further teaches that each slave transceiver is configured by mode control signal to receive a control signal from either a master transceiver or a slave transceiver (Col. 2, Lines 21-25, 38-41, and 49-67; Col. 3, Lines 1-7).

### ***Allowable Subject Matter***

Claims 5-8 and 13-20 are allowed. The following is an examiner's statement of reasons for allowance:

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Applicant's previous amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Agazzi et al (US 6,477,200) see figures 1 and 19.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freshteh N. Aghdam whose telephone number is (571)

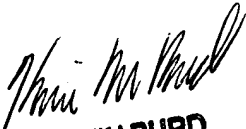
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272-6037. The examiner can normally be reached on Monday through Friday 9:00-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Freshteh Aghdam  
October 27, 2006

  
**KEVIN BURD**  
**PRIMARY EXAMINER**